

#### ABSTRACT:-

Disclosed is a brake system of the 'brake-by-wire' type for actuating a motor vehicle brake system having a brake booster which is operable in response to the driver's input by a brake pedal and to an electronic regulating and control unit. A device is provided to decouple a force-transmitting connection between the brake pedal and the brake booster in the 'brake-by-wire' operating mode. The electronic regulating and control unit (7) includes a control circuit for controlling the travel ( $S_{Ds}$ ) covered by the output member (20) of the brake booster (3), the nominal value ( $S_{Dsnominal}$ ) of the travel ( $S_{Ds}$ ) covered by the output member (20) of the brake booster (3) is calculated corresponding to the actuating travel ( $S_{Bp}$ ) of the brake pedal (1), and a monitoring module (24) is provided which, in the case of a fault such as the inclusion of air or brake circuit failure, performs a partial compensation of the extension of the travel ( $S_{Ds}$ ) covered by the output member (20) of the brake booster (3), which extension is caused by the fault.

#### Brake System

~~The invention discloses a brake system of the 'brake-by-wire' type for actuating a motor vehicle brake system comprising a brake booster which is operable in response to the driver's wish both by means of a brake pedal and by means of an electronic regulating and control unit, with a means being provided to decouple a force-transmitting connection between the brake pedal and the brake booster in the 'brake-by-wire' operating mode.~~

~~According to the invention, the electronic regulating and control unit (7) includes a control circuit for controlling the travel ( $S_{Ds}$ ) covered by the output member (20) of the brake booster (3), the nominal value ( $S_{Dsnominal}$ ) of the travel ( $S_{Ds}$ ) covered by the output member (20) of the brake booster (3) being calculated corresponding to the actuating travel ( $S_{Dp}$ ) of the brake pedal (1), and a monitoring module (24) being provided which, in the case of a fault such as the inclusion of air or brake circuit failure, performs a partial compensation of the extension of the travel ( $S_{Ds}$ ) covered by the output member (20) of the brake booster (3), which extension is caused by the fault.~~

~~(Figure 2)~~